ABSTRACT

A sealing structure for a solid-transferring screw installed inside a heating furnace such as a material-leveling screw and a product-discharging screw, the sealing structure enabling the solid-transferring screw to be lifted during operation while airtightness of the heating furnace is retained. A driving shaft of the solid-transferring screw passes through through-holes formed in side walls of the heating furnace and is supported by liftable supporting devices disposed outside the furnace. Sealing blocks are attached on outer edges of the through-holes to surround the periphery of the through-holes at the outside of the furnace. Sliding panels are disposed at outer sides of the sealing blocks and have sliding holes for sliding the screw-driving shaft so that the driving shaft extends through the sliding holes. The sliding panels are brought into contact with the sealing blocks via the sealing members therebetween so that the sliding panels are slidable in the vertical direction.